

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Claims 1-34 (Cancelled).

35. (Original) An indicator of seal breakage or of incomplete seal formation in a package, said indicator comprising an oxygen scavenging composition which includes a source of labile hydrogen or electrons and at least one reducible organic compound which, when treated with visible or ultraviolet light of a predetermined intensity or wavelength or [[K]] γ -rays, corona discharge, an electron beam or heat is reduced to a form which is oxidisable by ground state molecular oxygen regardless of the presence of a transition metal catalyst and such that, when the reduced form of the reducible organic compound is oxidised, there is a detectable change in a characteristic of said composition selected from the group consisting of: colour, fluorescence emission and UV-visible, infrared or near-infrared absorption.

36. (Original) The indicator of claim 35, wherein the at least one reducible organic compound is reduced by irradiation with light of a certain intensity or wavelength, γ -rays, corona discharge or exposure to an electron beam.

37. (Original) The indicator of claim 35, wherein the at least one reducible organic compound is reduced by treatment with heat.

38. (Original) The indicator of claim 35, wherein the reducible organic compound is selected from the group consisting of: quinones, photoreducible dyes and carbonyl compounds which have absorbance in the UV spectrum.

39. (Original) The indicator of claim 35, wherein the at least one reducible organic compound is present in a polymerised or oligomerised form.

40. (Original) The indicator of claim 39, wherein the polymerised organic compound comprises monomers or co-monomers which are covalently bonded to the reducible organic compound.

41. (Original) The indicator of claim 35, wherein the source of labile hydrogen or electrons is a compound having a hydrogen atom bonded to a carbon atom which is itself bonded to a nitrogen, sulfur, phosphorus or oxygen atom, or a salt of a sulfonic or carboxylic acid.

42. (Original) The indicator of claim 35, wherein the source of labile hydrogen or electrons is a polymer within which the reducible organic compound is dispersed or dissolved.

43. (Original) The indicator of claim 35, wherein the source of labile hydrogen or electrons is provided by the reducible organic compound and the reducible organic compound is dispersed in, dissolved in or covalently bonded to a polymer which does not readily donate hydrogen or electrons to the reducible organic compound.

44. (Original) The indicator of claim 43, wherein the reducible organic compound is a sodium sulfonate salt of polymerised 9, 10-anthraquinone, the sodium sulfonate salt providing the source of labile hydrogen or electrons.

45. (Original) The indicator of claim 35, wherein the reducible organic compound is present in a polymerised or oligomerised form and the source of labile hydrogen or electrons is provided by a constituent monomer(s) or co-monomer(s).

46. (Original) The indicator of claim 35, further comprising a scavenging component reactive towards an activated oxygen species.

47. (Original) The indicator of claim 46, wherein the scavenging component is a compound selected from the group consisting of: organic antioxidants, organic phosphites, organic phosphines, organic phosphates, hydroquinone and substituted hydroquinone, inorganic compounds, sulphur-containing compounds and nitrogen-containing compounds and their derivatives.

48. (Original) The indicator of claim 46, wherein the scavenging component is present in a polymerised or oligomerised form.

49. (Original) The indicator or claim 48, wherein the scavenging component comprises monomers or co-monomers which are covalently bonded to a compound selected from the group

consisting of: organic antioxidants, organic phosphites, organic phosphines, organic phosphates, hydroquinone and substituted hydroquinone, inorganic compounds, sulphur-containing compounds and nitrogen-containing compounds and their derivatives.

Claims 50-66 (Cancelled).

Please add new claims 67-83 as follows:

67. (New) A method of detecting seal breakage or incomplete seal formation in a package, said method comprising the steps of:

(i) providing said package, prior to sealing, with a package of an indicator comprising an oxygen scavenging composition which includes a source of labile hydrogen or electrons and at least one reducible organic compound, wherein said package is located on an internal surface adjacent to where a seal is to be formed,

(ii) treating the package with visible or ultraviolet light of a predetermined intensity or wavelength or γ -rays, corona discharge, an electron beam or heat so as to reduce the reducible organic compound to a reduced form which is oxidizable by ground state molecular oxygen regardless of the presence of a transition metal catalyst and such that, when oxidised, there is a detectable change in a characteristic of said composition selected from the group consisting of: colour, fluorescence emission and UV-visible, infrared or near-infrared absorption,

(iii) subjecting said package to a sealing process intended to seal the package, and

(iv) detecting, in the sealed package, a change in said characteristic of said composition, wherein any detected change is indicative of seal breakage or incomplete seal formation; wherein steps (ii) and (iii) may be carried out in either order.

68. (New) The method of claim 67, wherein step (ii) is carried out after step (iii).

69. (New) The method of claim 67, wherein the package is treated by irradiation with light of a certain intensity or wavelength, γ -rays, corona discharge or exposure to an electron beam.

70. (New) The method of claim 67, wherein the package is treated with heat.

71. (New) The method of claim 67, wherein the reducible organic compound is selected from the group consisting of: quinones, photoreducible dyes and carbonyl compounds which have absorbance in the UV spectrum.

72. (New) The method of claim 67, wherein the reducible organic compound is present in a polymerised or oligomerised form.

73. (New) The method of claim 67, wherein the polymerised organic compound comprises monomers or co-monomers which are covalently bonded to the reducible organic compound.

74. (New) The method of claim 67, wherein the source of labile hydrogen or electrons is a compound having a hydrogen atom bonded to a carbon atom which is itself bonded to a nitrogen, sulfur, phosphorus or oxygen atom, or a salt of a sulfonic or carboxylic acid.

75. (New) The method of claim 67, wherein the source of labile hydrogen or electrons is a polymer within which the reducible organic compound is dispersed or dissolved.

76. (New) The method of claim 67, wherein the source of labile hydrogen or electrons is provided by the reducible organic compound and the reducible organic compound is dispersed in, dissolved in or covalently bonded to a polymer which does not readily donate hydrogen or electrons to the reducible organic compound.

77. (New) The method of claim 76, wherein the reducible organic compound is a sodium sulfonate salt of polymerised 9, 10-anthraquinone, the sodium sulfonate salt providing the source of labile hydrogen or electrons.

78. (New) The method of claim 67, wherein the reducible organic compound is present in a polymerised or oligomerised form and the source of labile hydrogen or electrons is provided by a constituent monomer(s) or co-monomer(s).

79. (New) The method of claim 67, further comprising a scavenging component reactive towards an activated oxygen species.

80. (New) The method of claim 79, wherein the scavenging component is a compound selected from the group consisting of: organic antioxidants, organic phosphites, organic phosphines, organic phosphates, hydroquinone and substituted hydroquinone, inorganic compounds, sulphur-containing compounds and nitrogen-containing compounds and their derivatives.

81. (New) The method of claim 79, wherein the scavenging component is present in a polymerised or oligomerised form.

82. (New) The method of claim 81, wherein the scavenging component comprises monomers or co-monomers which are covalently bonded to a compound selected from the group consisting of: organic antioxidants, organic phosphites, organic phosphines, organic phosphates, hydroquinone and substituted hydroquinone, inorganic compounds, sulphur-containing compounds and nitrogen-containing compounds and their derivatives.

83. (Currently Amended) The method of claim 67, wherein the package strip ~~or ring~~ comprises a polymeric film or polymeric film layer.